# MULTIPLE PERSONALITY DISORDER AND DISSOCIATIVE DISORDER NOT OTHERWISE SPECIFIED

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## ABSTRACT

*The authors interviewed 166 patients with clinical diagnoses of multiple personality disorder and 57 with diagnoses of dissociative disorder not otherwise specified with the Dissociative Experiences Scale and the Dissociative Disorders Interview Schedule. The findings supported the concept of a spectrum of dissociation, with increasingly complex and symptomatic forms of dissociation related to increasingly severe childhood trauma.*

## INTRODUCTION

Several authors have proposed that the dissociative disorders exist on a spectrum of increasing severity and complexity, with multiple personality disorder (MPD) at the extreme end of the continuum (Braun, 1986; Orne, Dinges, & Orne, 1984; Ross, 1985; 1989). It is generally accepted that more severe dissociative disorders are related to more severe trauma. Increasing research evidence exists to support this view (Chu & Dill, 1990; Briere & Runtz, 1990; Ross, Anderson, Heber, & Norton, 1990).

As one moves right on the dissociative spectrum, the last disorders encountered prior to MPD are partial and atypical forms of MPD. These are classified by *DSM-III-R* (American Psychiatric Association, 1987) criteria as cases of dissociative disorder not otherwise specified (DDNOS). However, no systematic data exist to support the hypothesis that DDNOS is a less severe variant of MPD related to less severe trauma.

The purpose of this study is to compare the trauma histories and symptom profiles of subjects with MPD and DDNOS to determine whether the spectrum hypothesis is supported.

## METHOD

As described in a previous report (Ross, Miller, et al., 1990), we administered the Dissociative Experiences Scale (Bernstein & Putnam, 1986) and the Dissociative Disorders Interview Schedule (Ross, 1989) to 102 individuals with *DSM-III-R* clinical diagnoses of MPD in four different centers: Winnipeg, Ottawa, Utah, and California.

For the current project we continued to interview subjects with MPD in Winnipeg, Ottawa, and California, and additionally we also administered the two questionnaires to subjects with *DSM-III-R* clinical diagnoses of DDNOS at these three sites. Subjects were interviewed consecutively at the time of initial assessment in Winnipeg and California. In Ottawa, most subjects were interviewed as part of the current project after they had entered treatment for their dissociative disorder.

Subjects with clinical diagnoses of MPD were compared to those with clinical diagnoses of DDNOS on Dissociative Experiences Scale scores and all variables on the Dissociative Disorders Interview Schedule. T-tests were used for continuous variables and chi-square tests for dichotomous variables. A discriminant function analysis was done to determine how often the Dissociative Disorders Interview Schedule could correctly assign subjects to their clinical diagnostic group (MPD or DDNOS).

Subjects were assigned to the MPD and DDNOS groups based on their clinical diagnoses, and no subjects were reassigned based on DDIS findings.

## RESULTS

A total of 166 cases of MPD and 57 cases of DDNOS were interviewed.

### *Demographic Characteristics of Subjects*

There were no demographic differences between the subjects with MPD and those with DDNOS. Of the MPD subjects, 148 (89.2%) were female compared to 51 (89.5%) of the DDNOS group ($x^{2(1)} = 0.033$, ns). The average age of the MPD subjects was 31.8 years (S.D. 8.2) compared to an average of 32.7 years (S.D. 8.9) for the DDNOS group ($t(228) = 0.670$, ns). The MPD subjects had an average of 1.0 children (S.D. 1.3) compared to an average of 1.1 children (S.D. 1.4) for the DDNOS group ($t(220) = 0.637$, ns).

Of the MPD subjects, 75 were single, 50 married or living common-law, 40 separated or divorced, and one widowed, while of the DDNOS subjects, 26 were single, 17 mar-

ried or living common-law, 12 separated or divorced, and two widowed ($x^{2(3)} = 2.836$, ns). Of the MPD subjects, 45.5% were employed compared to 47.4% of the DDNOS subjects ($x^{2(1)} = 0.009$, ns).

*Dissociative Experiences Scale Scores*

The Dissociative Experiences Scale was not completed by 28 subjects, including the 20 subjects with MPD from Utah. The average score on the Dissociative Experiences Scale was 39.7 (S.D. 18.3) for the MPD group and 21.7 (S.D. 17.0) for the DDNOS group ($t(193) = 6.106$, $p < .00001$).

The MPD subjects scored higher than the DDNOS subjects on each of the three factors of the Dissociative Experiences Scale identified in a previous report (Ross, Joshi, & Currie, 1991) at $p < .0002$ or less.

*Dissociative Disorders Interview Schedule Diagnoses*

The MPD group met criteria for borderline personality disorder more often than the DDNOS group, but there were no differences in the frequencies of major depressive episode, substance abuse, or somatization disorder.

Of the MPD group, 102 (61.4%) were borderline compared to 23 (40.4%) of the DDNOS group ($x^{2(1)} = 6.833$, $p < .009$). Of the MPD group, 149 (89.8%) had been clinically depressed compared to 50 (87.7%) of the DDNOS group ($x^{2(1)} = 0.033$, ns). Of the MPD group, 66 (39.8%) met criteria for somatization disorder compared to 14 (24.6%) of the DDNOS group ($x^{2(1)} = 3.625$, ns). Of the MPD group, 85 (51.2%) met criteria for substance abuse compared to 24 (42.1%) of the DDNOS group ($x^{2(1)} = 1.066$, ns).

Of the MPD group, 157 (94.6%) met structured interview diagnostic criteria for MPD compared to 24 (42.1%) of the DDNOS group ($x = 73.031$, $p < .00001$).

*Dissociative Disorders Interview Schedule Symptom Clusters*

As shown in Table 1, the MPD group reported much higher levels of symptomatology on the key symptom clusters in the structured interview.

Statistical information for these comparisons is as follows: somatic symptoms ($t(221) = 4.023$, $p < .0001$); Schneiderian symptoms ($t(221) = 6.281$, $p < .00001$); secondary features of MPD ($t(221) = 9.534$, $p < .00001$); extrasensory/paranormal experiences ($t(221) = 2.490$, $p < .02$); borderline criteria ($t(221) = 3.557$, $p < .0005$); and number of positive amnesia items out of a total of six ($t(221) = 7.545$, $p < .00001$).

Of the MPD subjects, 89 (53.6%) reported sleepwalking compared to 22 (38.6%) of the DDNOS group ($x^{2(1)} = 3.251$, ns). Of the MPD group, 154 (92.8%) reported trance states compared to 45 (78.9%) of the DDNOS group ($x^{2(1)} = 7.065$, $p < .008$). Of the MPD group, 76 (45.8%) reported imaginary playmates as children compared to 16 (28.1%) of the DDNOS group ($x^{2(1)} = 4.787$, $p < .03$).

*Childhood Trauma Histories*

As shown in Table 2, the MPD group reported significantly more childhood trauma. Statistical information for these comparisons is as follows: physical abuse ($x^{2(1)} = 14.296$, $p < .0002$); sexual abuse ($x^{2} = 8.628$, $p < .004$); physical and/or sexual abuse ($x^{2(1)} = 7.720$, $p < .006$); duration of physical abuse ($t(125) = 0.190$, ns); number of physical abusers per subject ($t(221) = 2.534$, $p < .01$); duration of sexual abuse ($t(149) = 1.455$, ns); number of sexual abusers per subject ($t(221) = 3.227$, $p < .002$); and number of types of sexual abuse per subject ($t(221) = 4.023$, $p < .0001$). Variations in the degrees of freedom for these analyses are due to many respondents being uncertain when their abuse started and/or stopped: subjects who were uncertain were counted as missing data.

TABLE 1
Differences Between MPD and DDNOS on Key Symptom Clusters

| Symptom Cluster | MPD N = 166 | DDNOS N = 57 | p Value |
|---|---|---|---|
| Average Number of Symptoms Positive | | | |
| Somatic symptoms | 14.1 | 9.7 | .0001 |
| Schneiderian symptoms | 6.5 | 3.8 | .00001 |
| Secondary features of MPD | 10.2 | 5.2 | .00001 |
| Extrasensory/Paranormal Experiences | 5.3 | 4.1 | .02 |
| Borderline criteria | 5.1 | 3.9 | .0005 |
| Number of positive amnesia items | 4.1 | 2.6 | .00001 |
| Dissociative Experiences Scale Score | 39.7 | 21.7 | .00001 |

*Discriminant Function Analysis*

Three variables entered the stepwise discriminant function. These were: diagnostic criteria for MPD (Wilks' lambda 0.691295, F-value 83.155); secondary features of MPD (Wilks' lambda 0.625435, F-value 19.854); and diagnostic criteria for DDNOS (Wilks' lambda 0.611102, F-value 4.339).

These three variables were able to correctly assign 91.4% of the MPD subjects to the MPD group and 59.2% of the DDNOS subjects to the DDNOS group.

## DISCUSSION

The data support the spectrum hypothesis of dissociative disorders. DDNOS is a milder variant of MPD with less severe trauma and less severe symptomatology. The differentiation of MPD and DDNOS observed in Tables 1 and 2 is almost certainly conservative for two reasons. First,

there are undoubtedly as-yet-undiagnosed cases of full MPD in the DDNOS group, and these cases are likely more symptomatic than those with true DDNOS. If the DDNOS group were re-interviewed in two years, many of these reassignments could probably be made.

Secondly, the MPD group reports more amnesia. If all the amnesia were lifted in all subjects, the difference in degree of childhood trauma would likely be even greater than that observed at interview because the MPD group has likely dissociated more traumatic memories than have the DDNOS subjects. During therapy, recovery of these more severe memories might differentially increase the level of symptomatology in the MPD group.

In clinical practice, the diagnosis of DDNOS is used in three ways. One is to describe truly atypical dissociative disorders other than partial forms of MPD. The second is to temporarily classify MPD patients when alter personalities have not yet been contacted directly or when the full symptom profile has not yet emerged. The third usage of DDNOS is to classify partial forms of MPD, which are not at all atypical, and which fit logically on the dissociative spectrum. Most of the DDNOS subjects in the present study are in the second and third of these categories.

TABLE 2
Childhood Trauma Histories in MPD and DDNOS

| Symptom Cluster | MPD N = 166 | DDNOS N = 57 | p Value |
|---|---|---|---|
| | Percentage of Subjects Positive | | |
| Physical Abuse | 78.3 | 50.9 | .0002 |
| Sexual Abuse | 84.3 | 64.9 | .004 |
| Physical and/or Sexual Abuse | 91.0 | 75.4 | .006 |
| | Average Value | | |
| Duration of physical abuse in years | 14.5 | 14.1 | ns |
| Number of physical abusers per subject | 2.3 | 1.6 | .02 |
| Duration of sexual abuse in years | 12.0 | 9.5 | ns |
| Number of sexual abusers per subject | 2.3 | 1.4 | .002 |
| Number of types of sexual abuse | 4.7 | 2.6 | .0001 |

TABLE 3
Proposed Diagnostic Criteria for Multiple Personality Disorder, Partial Form

A. The existence within the individual of two or more personalities or personality states (each within its own relatively enduring pattern of perceiving, relating to, and thinking about the environment and self).

B. The personality states are not sufficiently distinct to meet criteria for multiple personality disorder, or a second personality never assumes complete executive control.

C. Inability to recall important personal information that is too extensive to be explained by ordinary forgetfulness.

Preliminary epidemiological evidence (Ross, 1991) suggests that MPD may affect 1% of the adult general population, and the dissociative disorders as a group may affect 10% of the population. If these figures are approximately correct, partial forms of MPD may be quite common, possibly more common than full MPD. We think it would be useful to take partial forms of MPD out of the DDNOS category and place them in a diagnostic niche of their own. They could be called *multiple personality disorder, partial form.*

The diagnostic criteria for MPD, partial form, in *DSM-V* could read as shown in Table 3. Formal definition of partial forms of MPD would facilitate systematic investigation of treatment questions. The intensive psychotherapy of partial forms of MPD may be shorter, less arduous, less disruptive to psychosocial function, and less costly than treatment of full MPD. It is possible that the psychotherapeutic work can be done in partial forms of MPD without the internal personality states taking executive control during sessions.

We believe that MPD is the paradigmatic example of the human response to severe, chronic, childhood trauma. The earlier the onset of the abuse, the longer the duration, the more closely related the perpetrators, the greater the degree of perversion and violence of the abuse, and the greater the

number of perpetrators, the more chronic and complex the resulting dissociative disorder. These trauma factors are balanced against constitutional strengths and restorative life events, and interact with the individual's innate degree of dissociative capacity, as outlined by Kluft (1984) in his four-factor theory of MPD.

In summary, the data support the view that DDNOS is a milder variant of MPD related to less severe trauma. Partial forms of MPD warrant their own diagnostic category separate from DDNOS. Both full and partial forms of MPD may be as common in the general population as schizophrenia, therefore the diagnostic issues are of general relevance within the mental health field. ■

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